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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/892,669	06/27/2001	Arto Lehtonen	442-010347-US(PAR)	3939

7590 06/29/2005

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EXAMINER	
YANG, RYAN R	
ART UNIT	**PAPER NUMBER**
2672	

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/892,669	LEHTONEN, ARTO	
	Examiner	Art Unit	
	Ryan R. Yang	2672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 January 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/27/2005 has been entered.

2. This action is responsive to communications: Amendment, filed on 1/27/2005. This action is non-final.

3. Claims 1-11 are pending in this application. Claims 1 and 7 are independent claims. In the Amendment, filed on 1/27/2005, claims 1 and 7 were amended.

4. This application claims foreign priority dated 6/30/2000.

5. The present title of the invention is "Method and system for displaying markup language based pages on handheld devices" as filed originally.

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 1, 3-4, 6-7 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carter et al. (5,909,540) and further in view of Fleischman et al. (5,196,934).

As per claim 1, Carter et al., hereinafter Carter, disclose a method of displaying markup language based Web page on a handheld device, wherein the handheld device comprises a browser, a virtual memory functionally connected to a horizontal pixel counter and a horizontal pixel filter and to a vertical pixel counter and a vertical pixel filter, a display memory functionally connected to the horizontal pixel filter and to the vertical pixel filter, and a display functionally connected to the display memory, the method comprising the steps of:

loading said Web page into the virtual memory for deriving the resized representation of the Web page ("The system further provides distributed control for a plurality of different types of structured storage systems, such as file systems, database systems, and systems that store, share, and deliver Web pages to requesting nodes", column 3, column 3, line 11-14, and "each node 212a-212c connects via the shared memory subsystem 220 to a virtual shared memory 222", column 20, line 1-17); storing the remaining horizontal and vertical pixels in the display memory (Figure 8 212c); and

displaying the Web page from the display memory (Figure 8 232 "each memory subsystem 232 that connects between the operating system 216 and the two local memory devices, the RAM 234 and the disk 216", column 21, line 10-17).

Carter discloses a method of loading a web page into a virtual memory of a display device. It is noted Carter does not explicitly disclose "reading from the virtual memory a bit stream of horizontal pixels and a bit stream of vertical pixels, and feeding the bit streams to the horizontal pixel counter and the vertical pixel counter

respectively; counting the horizontal pixels from the horizontal bit stream with the horizontal pixel counter and removing a portion of the horizontal pixels with the horizontal pixel filter; counting the vertical pixels from the vertical bit stream with the vertical pixel counter and removing a portion of the vertical pixels with the vertical pixel filter", however, this is known in the art as taught by Fleischman et al., hereinafter Fleischman. Fleischman discloses a method of reducing image size by reading and feeding horizontal and vertical signals to the horizontal and vertical pixel counter (Figure 1 14(H) and 14(V)), counting and removing a portion of the pixels with a filter (Figure 3 41 as counter and Figure 7 as filter).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Fleischman into Carter because Carter discloses a method of downloading a web page into a display virtual memory and Fleischman discloses a image can be reduced in size in order for the image to be fitted onto a display of lesser size.

8. As per claim 3, Carter and Fleischman demonstrated all the elements as applied to the rejection of independent claim 1, supra.

Carter and Fleischman disclose a method of loading a web page into a virtual memory of a display device and reduce the image into lesser size. It is noted that Carter and Fleischman do not explicitly disclose "the horizontal pixel counter and horizontal pixel filter flags and removes every fifth pixel from the horizontal bit stream", however, since Fleischman teach reducing image by counting and dropping pixels and since there is no disclosed merit in the invention of removing every fifth pixel as

opposed to any other pixels, it is clearly an inventor's choice and would have been obviously to one of ordinary skill in the art to choose any pixel, including the fifth pixel, to drop in order to reduce an image to a desired size.

9. As per claim 4, Carter and Fleischman demonstrated all the elements as applied to the rejection of independent claim 1, supra.

Carter and Fleischman disclose a method of loading a web page into a virtual memory of a display device. It is noted that Carter and Fleischman do not explicitly disclose "the vertical pixel counter and vetical pixel filter flags and removes every third pixel from the vertical bit stream", however, since Fleischman teach reducing image by counting and dropping pixels and since there is no disclosed merit in the invention of removing every third pixel as opposed to any other pixels, it is clearly an inventor's choice and would have been obviously to one of ordinary skill in the art to choose any pixel, including the third pixel, to drop in order to reduce an image to a desired size.

10. As per claim 6, Carter and Fleischman demonstrated all the elements as applied to the rejection of independent claim 1, supra.

Carter and Fleischman disclose a method of downloading and display reduced image. It is noted that Carter and Fleischman do not explicitly disclose the "compressed Web page is stored in the display memory for display in 640x300 resolution", however, since Fleischman discloses an image can be reduced to any size, and since there is no disclosed merit in the invention of using 640x300 resolution vs any other well known size, it is clearly an inventor's choice and would have been

obviously to one of ordinary skill in the art to choose any size, including 640x300, in order to make a display of reduced size.

11. As per claim 7, Carter discloses a handheld device comprising a browser for use in loading a markup language based Web page, a display memory, and a device display for viewing the Web page, and the handheld device further comprises:

a virtual memory for storing the loaded Web page comprised of horizontal and vertical pixels (Figure 8 232c as virtual memory) and storing the reduced image to a display image for viewing the resized representation of the Web page on the device display (Figure 8 212c).

Carter discloses an apparatus for loading a web page into a virtual memory of a display device. It is noted Carter does not explicitly disclose "a horizontal pixel counter for counting pixels read from the virtual memory in a horizontal bit stream; a horizontal pixel filter for removing pixels from the horizontal pixel bit stream; a vertical pixel counter for counting pixels read from the virtual memory in a vertical bit stream; and a vertical pixel filter for removing pixels from the vertical pixel bit stream", however, this is known in the art as taught by Fleischman. Fleischman discloses a method of reducing image size by reading and feeding horizontal and vertical signals to the horizontal and vertical pixel counter (Figure 1 14(H) and 14(V)), counting and removing a portion of the pixels with a filter (Figure 3 41 as counter and Figure 7 as filter).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Fleischman into Carter because Carter discloses a method of downloading a web page into a display virtual memory

and Carter discloses the image can be reduced in size in order for it to be fitted onto a display of lesser size.

12. As per claim 9, Carter and Fleischman disclose an apparatus of downloading and display reduced image. It is noted that Carter and Fleischman do not explicitly disclose the virtual memory is configured to store an SVGA Web page, however, since SVGA is a notoriously well known web page format, it would have been obvious to one of ordinary skill in the art to store in such format in order to preserve its originality.

13. As per claim 10, Carter and Fleischman demonstrated all the elements as applied to the rejection of independent claim 7, supra.

Carter and Fleischman disclose an apparatus of downloading and display reduced image. It is noted that Carter and Fleischman do not explicitly disclose the display memory is adapted to store a resized 640x300 page, however, since Fleischman discloses an image can be reduced to any size, and since there is no disclosed merit in the invention of using 640x300 resolution vs any other well known size, it is clearly an inventor's choice and would have been obviously to one of ordinary skill in the art to choose any size, including 640x300, in order to make a display of reduced size.

14. As per claim 11, Carter and Fleischman demonstrated all the elements as applied to the rejection of independent claim 7, supra, and Fleischman further disclose the horizontal and vertical pixel filters are low pass filters (Figure 7 as a low pass filter to remove the drop bit).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Fleischman into Carter because Carter discloses a method of downloading a web page into a display virtual memory and Fleischman discloses the image can be reduced in order to be fitted into a display.

15. Claims 2 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carter et al. in view of Fleischman et al. (5,196,934) and further in view of Bjork et al. (ACM Symposium on User Interface Software and Technology, 1999).

As per claim 2, Carter and Fleischman demonstrated all the elements as applied to the rejection of independent claim 1, supra.

Carter and Fleischman disclose a method of downloading and display reduced image. It is noted that Carter and Fleischman do not explicitly disclose the web page can be downloaded from a wireless radio link, however, this is known in the art as taught by Bjork et al., hereinafter Bjork. Bjork discloses a palm display (Figure 1) where the image can be reduced (Figure 7) and is Wireless Application Protocol (WAP) compliant (see Abstract).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Bjork into Carter and Fleischman because Carter and Fleischman disclose a method of downloading and display reduced image and Bjork discloses the display device can be wireless in order to be portable.

16. As per claim 8, Carter and Fleischman demonstrated all the elements as applied to the rejection of independent claim 7, supra.

Carter and Fleischman disclose an apparatus of downloading and display reduced image. It is noted that Carter and Fleischman do not explicitly disclose the web page can be downloaded from a wireless radio link, however, this is known in the art as taught by Bjork et al., hereinafter Bjork. Bjork discloses a palm display (Figure 1) where the image can be reduced (Figure 7) and is Wireless Application Protocol (WAP) compliant (see Abstract).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Bjork into Carter and Fleischman because Carter and Fleischman disclose a method of downloading and display reduced image and Bjork discloses the display device can be wireless in order to be portable.

17. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carter et al. in view of Fleischman et al. (5,196,934) and further in view of Haas et al. (6,037,926).

As per claim 5, Carter and Fleischman demonstrated all the elements as applied to the rejection of independent claim 1, supra.

Carter and Fleischman disclose a method of downloading and display reduced image where the image downloaded to the virtual memory is web page image. It is noted that Carter and Fleischman do not explicitly disclose "downloaded Web page is stored in the virtual memory in 800x450 resolution", however, this is known in the art as taught by Hass et al., hereinafter Haas. Haas discloses a method of displaying an image by reformatting it into 800x450 resolution ("Starting with a 4:3 SVGA driver, the

number of vertical pixels (horizontal lines) must be reduced by a factor which yields a format display ratio of 16:9, based on a horizontal width of 800 square pixels, namely 800*(9/16)=450 pixels. The new raster is 800 by 450 pixels", column 6, line 59-64).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Haas into Carter and Fleischman because Carter and Fleischman disclose a method of downloading and display reduced image where the image downloaded to the virtual memory is web page image and Haas discloses the image can be re-formatted in order to be displayable on a SVGA monitor.

Response to Arguments

18. Applicant's arguments filed 1/2/2005 have been fully considered but they are not persuasive.

Applicant alleges that in resizing a Web page the functional representation of the Web page as well as the pixel image is resized. Examiner considers the claim limitations do not exclude the case when the Web page is just a pixel image without functional attachment. Assuming the applicant's argument that there's a functional representation to be resized is valid, the claim limitations do not address how this is done. The claim limitations only address removing of the pixels.

Inquiries

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan R Yang whose telephone number is (571) 272-7666. The examiner can normally be reached on M-F 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on (571) 272-7664. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306 ((571) 273-8300 after 7/15/2005).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ryan Yang
June 27, 2005